SOURCE CODE: UR/3137/64/000/081/0001/0010

AUTHOR: Zolototrubov, I. M.; Rastrepin, A. B.; Skoblik, I. P.

ORG: Academy of Sciences UkrSSR, Physicotechnical Institute (Akademiya Nauk UkrSSR, Fiziko-tekhnicheskiy institut)

TITLE: Investigation of energy partition in hydrogen plasma from a coaxial source

SOURCE: AN UkrSSR. Fiziko-tekhnicheskiy institut. Doklady, no. 081/P-033, 1964. Issledovaniye energiticheskogo raspredeleniya vodorodnoy plazmy koaksial'nogo istochnika, 1-10

TOPIC TAGS: plasma gun, hydrogen plasma, gas discharge spectroscopy

ABSTRACT: Energy partition in the hydrogen plasma produced in a coaxial gun is investigated in an apparatus that includes an ion energy spectrum analyzer. The gun operates at 30 ka and the [illegible] The plasma [illegible] the [illegible] amplitude [illegible] cm^3 of hydrogen [illegible] evacuated chamber at various intervals before the application of the voltage pulse to the gun electrodes. The ions generated in the discharge are analyzed in the [illegible] energy detector using the magnetic [illegible] to produce [illegible] deflection of the ions [illegible] current is detected by [illegible] crystal [illegible] detector was used to determine the

Card 1/2

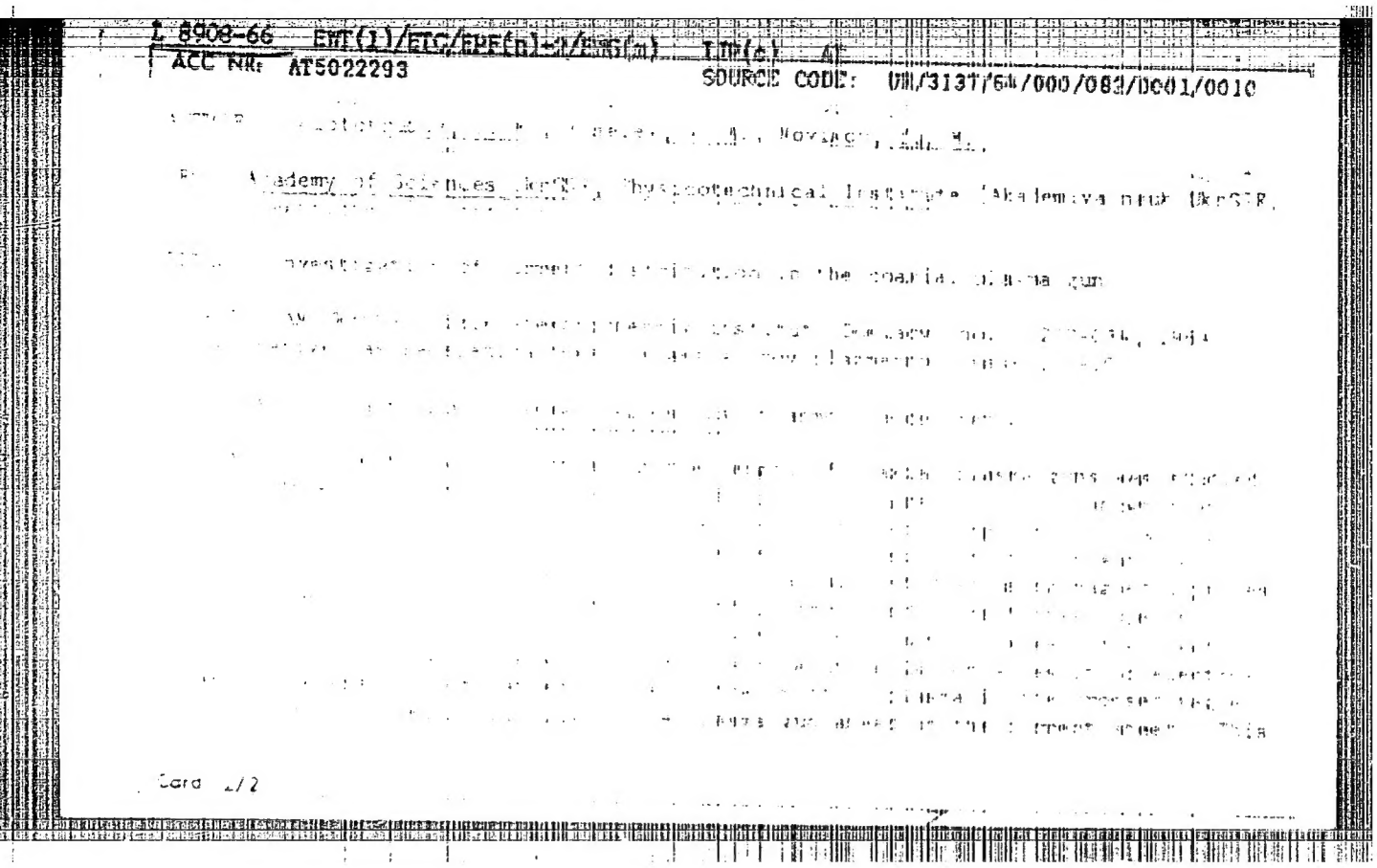
L 8226-66

ACC NR: AT5024119

time of formation of the ions in the gun by determining the time between the start of the discharge and the peak of the ion current. The energy spectrum for H_1 ions for [illegible] sec is given. Additionally, it is shown that [illegible]

SUB CODE: 20/ SUBM DATE: 30/ ORIG REF: 009/ OTH REF: 006

Card 2/2



L 8908-66 EWT(1)/ETC/EPF(n)-2/EWG(m) IJP(c) AT
ACC NR: AT5022293 SOURCE CODE: UR/3137/64/000/083/0001/0010

Academy of Sciences UkrSSR, Physicotechnical Institute (Akademiya nauk UkrSSR,

Card 1/2

L 8903-66

ACC NR: AT5022293

is consistent with the magnitude of the Larmour radius, which turns out to be com-

Card 2/2

AT6006750 ...EPF(n)-2/EWG(m) IJP(c)

SOURCE CODE: UR/3137/64/000/080/0001/0008

AUTHORS: Zolototrubov, I. M.; Kiselev, V. A.; Novikov, Yu. M.; Tolok, V. T.

ORG: none

TITLE: Operation of a coaxial plasma source in a longitudinal magnetic field

SOURCE: AN UkrSSR. Fiziko-tekhnicheskiy institut. Doklady, no. 080/P-032, 1964. Rabota koaksial'nogo plasmennogo istochnika v prodol'nom magnitnom pole, 1-8

TOPIC TAGS: plasma gun, plasma injection, plasmoid, hydrogen plasma, plasma structure, plasmoid acceleration, longitudinal magnetic field

ABSTRACT: To produce a plasmoid with a relatively small number of impurities and neutral particles, the authors developed a new construction, in which the coaxial plasma gun is placed in a longitudinal magnetic field, with an aim of having the rotation of the plasma in the crossed electric and magnetic fields symmetrize the discharge in

Card 1/3

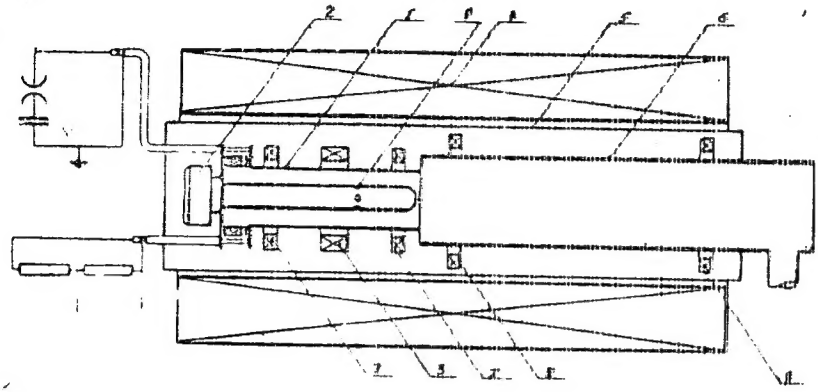


Fig. 1. Diagram of setup. 1 -- Gun, 2 -- vacuum valve, 3 -- field coil, 4 -- solenoid, 5 -- screen, 6 -- vacuum system, 7, 8 -- magnetic probes, 9 -- gas-inlet openings.

azimuth and increase the degree of confinement and the magnitude of

L 24318-66

ACC NR: AT6006750

The rotation of the plasma was measured with external probes [illegible] the plasma in the azimuthal direction was investigated [illegible] The experiment has shown that [illegible] azimuthal field [illegible] the [illegible] the plasma [illegible] A [illegible] of the [illegible] is the small longitudinal [illegible] 10^{-7} mm Hg) and insufficient ionization. These [illegible] in the future. Orig. art. has: 4 figures.

SUB CODE: 20/ ORIG REF: 002/ OTH REF: 003

SUBM DATE: none

Card 3/3

ACC NR: AT6008850 SOURCE CODE: UR/0000/65/000/000/0116/0120

AUTHOR: Zolototrubov, I. M.; Ryzhov, N. M.

ORG: none

TITLE: Distribution of pressure along a coaxial system after pulsed gas admission

SOURCE: AN UkrSSR. Magnitnyye lovushki (Magnetic traps). Kiev, Naukova dumka, 1965, 116-120

TOPIC TAGS: manometer, pressure measurement, plasma gun, gas pressure / MI-10S manometer

ABSTRACT: The authors show that a MI-10S ionization manometer may be used for measuring pulsed pressures. This is a plane-parallel manometer with the cathode placed between the anode and the collector and may be used for measuring pressures from [illegible] to [illegible] N/m². The manometer has a tantalum wire cathode on an iridium base which is more resistant to poisoning than the usual tungsten cathode. The manometer has [illegible] lifetime [illegible] which permits operation in restricted spaces. Measurements showed that the sensitivity of the manometer is independent of the emission current. A comparison between readings of the MI-10S manometer and those of the LT-2 thermocouple gauge under stationary pressure conditions showed no significant differences. The average sensitivity in all pressure ranges was found to be $3.56 \cdot 10^{-3}$ N/m². The error in pressure determination is no more than 20-15%. The instrument was used for mea-

Card 1/2

suring the distribution of pulsed pressure of a neutral gas along a coaxial plasma gun with the following geometric parameters: length 66 cm, diameter of the external electrode 6.5 cm, diameter of the central electrode 3 cm. Curves are given showing the pressure distribution for hydrogen along the gun at various times with respect to the initial opening of the valve. It was found that the velocity for propagation of the gas front reduces as the density of the front increases. The gas is propagated at a higher velocity as the quantity of the admitted gas is increased. The method described in this paper may be used for measuring pulse pressure in any systems and in any pressure ranges. Logarithmic amplifiers must be used for pressure variations in extremely wide ranges. Orig. art. has: 3 figures.

SUB CODE: 20/ SUBM DATE: 20Oct65/ ORIG REF: 001/ OTH REF: 002

ACC NR: AT6020414 IJP(c) AT/GD (N) SOURCE CODE: UR/0000/65/000/000/0165/0171

AUTHOR: Zolototrubov, I. M.; Kiselev, V. A.; Novikov, Yu. M.; Tolok, V. T. 64 B+1

ORG: none

TITLE: Operation of the coaxial plasma source in a longitudinal magnetic field

SOURCE: AN UkrSSR. Issledovaniye plazmennykh sgustkov (Study of plasma clusters). Kiev, Naukovo dumka, 1965, 165-171

TOPIC TAGS: plasma gun, plasma source, plasma magnetic field, plasma dynamics, LONGITUDINAL MAGNETIC FIELD

ABSTRACT: An attempt to develop a plasma source free of impurities by the use of a coaxial gun in a longitudinal magnetic field is discussed. The plasma gun and its operation is described, its energy source is a battery of condensers (1000 μf) working at 5 kv, the working gas is hydrogen injected by a fast-acting valve. When the gun is operated in the magnetic field, the discharge current plate appears. This, together with the observation of the plasma ejection velocity, indicates plasma drift typical of crossed electric and magnetic fields. High speed photography reveals that the plasma generated when the magnetic field is applied is much more uniform than in the absence of the field. Spectroscopic analysis shows that the magnetic field inhibits very strongly the appearance of electrode material impurities found in discharges without the external field. It is planned to overcome the insufficient ionization and

Card 1/2

L 43800-66

ACC NR: AT6020414

low plasma velocity by increasing the electric power input and the modified magnetic field. Orig. art. has: 6 figures, 1 formula.

SUB CODE: 20/ SUBM DATE: 11Nov65/ ORIG REF: 002/ OTH REF: 003

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R002065410016-6"

Card 2/2

L 11 001-00 EWT(1)/T IJP(c) JGS/GD/AT

ACC NR: AT6020412 (N) SOURCE CODE: UR/0000/65/000/000/0148/0156

AUTHOR: Zolototrubov, I. M.; Kiselev, V. A.; Novikov, Yu. M. 77

ORG: none B+/

TITLE: Current distribution in a coaxial plasma gun

SOURCE: AN UkrSSR. Issledovaniye plazmennykh sgustkov (Study of plasma clusters). Kiev, Naukovo dumka, 1965, 148-156

TOPIC TAGS: plasma gun, plasmoid, high speed photography, PLASMA DISCHARGE, ELECTRODYNAMICS

ABSTRACT: The purpose of this work was to determine the current distribution in a coaxial plasma gun and the electrodynamic forces acting on the plasma. The current distribution was determined by a differential magnetic probe and the measurements were taken at different delays between the initial gas injection and time of the discharge. When this delay was 200-300 μsec, discharge current formed several sheets arising due to partial current flows at insulation walls. The probe and fast streak photography data showing this effect are given in the text. Evidence of the trapped magnetic field between the current sheets was also found. It was found that for small delay times, only single current sheets are formed and that their velocity drastically increases during the current maximum. In addition to current sheets, observation of plasmoids was made and it was found that their velocities reached several times that

Card 1/2

ACC NR: AT6020412

of the sheets ($8 \cdot 10^7$ cm/sec) showing that they are not accelerated by the electromagnetic interaction with the current, but rather by the drift-inducing fields. This was further substantiated by observing counter-streaming sheets and plasmoids in another set of experiments. Orig. art. has: 6 figures.

SUB CODE: 20/ SUBM DATE: 11Nov65/ ORIG REF: 002/ OTH REF: 003

Card 2/2

ACC NR: AP6018729 SOURCE CODE: UR/0057/66/036/006/1040/1048

AUTHOR: Zolototrubov,I.M.; Kiselev,V.A.; Novikov, Yu.M.; Rynkov, N.M.; Tolok, V. T.

ORG: none

TITLE: A coaxial plasma gun in a longitudinal magnetic field

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 6, 1966, 1040-1048

TOPIC TAGS: plasma gun, hydrogen plasma, contamination, longitudinal magnetic field,

ABSTRACT: In an effort to improve the purity and the uniformity with regard to velocity, density, and total number of particles of the plasma bursts from a coaxial plasma gun, the authors investigated the influence of a longitudinal magnetic field on the performance of the gun. It was anticipated that the rotation of the plasma within the gun, due to the Lorentz force on the radial current in the longitudinal magnetic field, would improve the azimuthal uniformity of the current sheet. The diameters of the inner and outer stainless steel electrodes of the 70 cm long coaxial gun were 3 and 7 cm, respectively. The gas (0.1 cm^3 of hydrogen) was admitted through six openings in the inner electrode near its center, and the gun was fired by the 20 kV discharge of a 12 microfarad capacitor. The plasma gun was located in the uniform portion of the field of a 1.4 m long solenoid. The magnetic field rose to its maximum strength of up to 8 kOe in 28 millisec and subsequently decayed exponentially with a time constant of 72 millisec. The processes taking place within the plasma gun

Card 1/2

UDC: 533.9

ACC NR: AP6018729

were investigated with the aid of a magnetic probe and by recording the discharge current, and the plasmas ejected from the gun were investigated with an external magnetic probe, a spectrograph, a photomultiplier, a monochrometer with the aid of which the intensities of different spectrum lines were displayed on an oscillograph, and a thermal probe. The rather involved processes that took place within the gun are discussed at some length. The rotation of the plasma gave rise to a magnetic trap within which a considerable portion of the gas was confined. Two plasma bursts were usually produced, but under some conditions it was possible to obtain only one burst containing some 2×10^{16} particles at a density of 2.4×10^{13} cm^{-3} and moving with a velocity of 3×10^{7} cm/sec. The purity of the plasma bursts increased with increasing longitudinal magnetic field strength; at a magnetic field strength of 6.4 kOe there were no lines due to electrode materials in the spectrum, and the lines due to carbon, oxygen, and nitrogen were considerably weaker than in the spectra of plasmas produced without the magnetic field. It is concluded that with the aid of a longitudinal magnetic field one can obtain from a coaxial plasma gun pure high energy plasmas free of slow and contaminated tails, but at the cost of inefficient use of the energy stored in the capacitor bank. The authors thank O.M.Shveto, and Ya.F.Volkov for discussions and criticism. Orig. art. has: 3 formulas and 7 figures.

SUB CODE: 20/ SUBM DATE: 26Apr65/ ORIG. REF: 004/ OTH REF: 002

Card 2/2 hs

L 41006-66 EWT(1)/EWT(m)/T IJP(c) DS/AT

ACC NR: AP6018730 SOURCE CODE: UR/0057/66/036/006/1049/1054

AUTHOR: Zolototrubov, I.M.; Skoblik, I.P.; Skibenko, A.I.; Ryzhov, N.M.

ORG: none

TITLE: Structure of the plasmas emitted by a coaxial plasma gun with different electrode polarities

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 6, 1966, 1049-1054

TOPIC TAGS: plasma gun, hydrogen plasma, plasma velocity, plasma density, electrode polarity, PLASMA STRUCTURE

ABSTRACT: The authors investigated the influence of electrode polarity and duration of the delay between gas injection and discharge of the gun on the structure of the plasmas ejected during the first half-period (6.5 microsec) of operation of a 60 cm long coaxial plasma gun with electrode diameters of 3 and 6.5 cm. The gas was admitted during the course of 80 microsec through a single opening in the center of the outer electrode, and the gun was fired after a delay ranging from 100 to 260 microsec by the discharge of a 20 kV, 12 microfarad capacitor. The plasmas were investigated in a 10 cm diameter, 1.2 m long glass drift tube with the aid of two diamagnetic probes, an 8 mm wavelength microwave interferometer, a 4 mm wavelength microwave beam, and a thermal probe. Under all conditions there was observed a jet of unionized gas with a

Card 1/2

UDC: 533.9

L 41008-66

ACC NR: AP6018730

velocity of 2×10^6 cm/sec. When the inner electrode of the plasma gun was positive there were ejected three plasma bursts with velocities (when the delay time was 100 microsec) of 5×10^7, 1.5×10^7, and 5×10^6 cm/sec and particle densities of less than 10^{12}, 6×10^{12}, and 7×10^{13} cm^{-3}, respectively. When the inner electrode was negative there were only two plasma bursts, with velocities and particle densities (again for a delay time of 100 microsec) of 3.5×10^7 and 8.7×10^6 cm/sec, and 3.5×10^{12} and 7×10^{13} cm^{-3}, respectively. The velocity of the slowest burst was almost independent both of delay time and of electrode polarity, and its density, also independent of electrode polarity, increased with increasing delay time. The velocities and densities of the faster bursts decreased with increasing delay time. The authors thank L.A.Dushin, V.T.Tolok, O.M.Shvets, and Ya.F.Volkov for discussions. Orig. art. has: 2 formulas, 6 figures and 2 tables.

SUB CODE: 20 SUBM DATE: 18Mar65 ORIG. REF: 006 OTH REF: 001

Card 2/2 hs

ZOLOTOV, A.

For new achievements in our work. Grazhd. av. no.3:7 Mr '61.
(MIRA 14:3)

1. Nachal'nik Leningradskogo aeroporta.
(Leningrad--Airports--Management)

ZOLOTOV, A.

...plus a business-like approach. Sov.profsoiuzy 19 no.3:14 F '63. (MIRA 16:2)

1. Starshiy instruktor zhilishchno-bytovogo otdela Leningradskogo soveta professional'nykh soyuzov.
(Leningrad—Construction industry—Auditing and inspection)

KALININA, N.; ZOLOTOV, A.

Pickled mushrooms. Rabotnitsa 37 no.8:31 Ag '59.
(MIRA 13:1)

(Cookery (Mushrooms))

ZOLOTOV, A.A.

Insulating and winding unit. Biul. tekh.-ekon. inform. Gos. nauch.-issl. inst. nauch. i tekh. inform. 17 no.2:44-46 '64. (MIRA 17:6)

KARASEV, I.P.; ZOLOTOV, A.N.; POSTNIKOV, V.G.; FUKS, B.A.

Some problems in the field prospecting of fractured carbonate reservoir rocks in the Markovo oil field. Trudy VNII no.43: 144-156 '60. (MIRA 18:6)

[illegible], A. N.

Three winters in the Arctic. Moskva, 1940. 43 p. (Bibliotechka "Stakhanovtsy Arktiki," kn. 27) (49-34747)

G630.R826

1. Arctic regions. 2. Scientific expeditions.
I. Russia (1923- U.S.S.R.) Glavnoe upravlenie Severnogo morskogo puti. Politicheskoe upravlenie.

GORBACHEV, V.F.; ZOLOTOV, A.N.; POVYSHEV, A.S.

Methodology of oil search and exploration in the Irkutsk amphitheater. Geol.nefti i gaza 9 no.2:24-27 F '65.

(MIRA 18:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut prirodnogo gaza i trest Vostosibneftegeologiya.

ZOLOTOV, A. N.

Nurseries (Horticulture)

Mechanization of cutting of stocks in fruit nurseries. Sad i og., No. 4, 1952.

Monthly List of Russian Accessions, Library of Congress
June 1952. UNCLASSIFIED.

ZOLOTOV, A. N.

Grafting

Mechanization of cutting of stocks in fruit nurseries. Sad i ov., No. 4, 1952.

Monthly List of Russian Accessions, Library of Congress
June 1952. UNCLASSIFIED.

(41)

*Comparison of the Thermal Noises of Some Materials by a Zero Method. V. S. Troitsky, A. G. Lyubina, and A. V. Zoletov (*Doklady Akad. Nauk S.S.S.R.*, 1951, 80, (4), 583-586).—[In Russian]. Materials used were Nichrome, Cu, Sn, Constantan, W, Ag, Ni, Mo, Fe, graphite, and 1% KCl soln. with Pt electrodes. The results obtained are in agreement with Nalquist's formula $w/4RT = k'$, in which w is the spectral d of the noise, R the resistance of the specimen, and T its temp. The const. k' does not depend on the material or its condition, nor on R or T; this does not agree with the results of Pumper (*ibid.*, 1949, 69, 277; *M.A.*, 20, 857). k' is probably equal to Boltzmann's const.—G. V. P. T.

Zolotov, A.V.

PHASE I BOOK EXPLOITATION SOV/3600

Yadernaya geofizika; sbornik statey po ispol'zovaniyu radioaktivnykh izlucheniy i izotopov v geologii nefti (Nuclear Geophysics; Collection of Articles on the Use of Radioactive Radiation and Isotopes in Petroleum Geology) Moscow, Gostoptekhizdat, 1959. 370 p. Errata slip inserted. 4,000 copies printed.

Ed.: F.A. Alekseyev, Professor, Doctor of Geological and Mineralogical Sciences; Exec. Ed.: A.P. Kalmantarov; Tech. Ed.: A.S. Polosina.

PURPOSE: This book is intended for petroleum geologists, geophysicists and scientists engaged in geological research who are interested in radiometric techniques of petroleum prospecting.

COVERAGE: The collection contains 28 articles compiled by staff members and aspirants of the Laboratory for Nuclear Geology and Geophysics of the Petroleum Institute (now the Institute for Geology and Mineral Fuel Processing) of the Academy of Sciences USSR, the Laboratory for Radioactive Logging of the All-Union Scientific Research Institute of Geophysics, and the heads of councils for planning research projects for petroleum enterprises. The articles treat new material on radiometric surveying in petroleum geology, describe radiometric instruments (counters, etc.) for registering neutrons and gamma rays, give the results of research with models of rock strata, introduce fundamentals of a new method for effectively utilizing radioactivity in the analysis of rock samples from petroleum-survey bore holes, etc. Problems of method in the study and interpretation of radiometric measurements in bore holes are reviewed, as well as the results of studies in the nonabsorption of tritium in tracing the movement of petroleum and water in a stratum. Finally, a new method of surveying based on measuring the radioactivity of the surface of a prospective petroleum deposit is described. No personalities are mentioned. References accompany each article.

Zolotov, A.V.

PHASE I BOOK EXPLOITATION SOV/3600

Yadernaya geofizika; sbornik statey po ispol'zovaniyu radioaktivnykh izlucheniy i izotopov v geologii nefti (Nuclear Geophysics; Collection of Articles on the Use of Radioactive Radiation and Isotopes in Petroleum Geology) Moscow, Gostoptekhizdat, 1959. 370 p. Errata slip inserted. 4,000 copies printed.

Ed.: F.A. Alekseyev, Professor, Doctor of Geological and Mineralogical Sciences; Exec. Ed.: A.P. Kalantarov; Tech. Ed.: A.S. Polosina.

PURPOSE: This book is intended for petroleum geologists, geophysicists and scientists engaged in geological research who are interested in radiometric techniques of petroleum prospecting.

COVERAGE: The collection contains 23 articles compiled by staff members and aspirants of the Laboratory for Nuclear Geology and Geophysics of the Petroleum Institute (now the Institute for Geology and Mineral Fuel Processing) of the Academy of Sciences USSR, the Laboratory for Radioactive Logging of the All-Union Scientific Research Institute of Geophysics, and the heads of councils for planning research projects for petroleum enterprises. The articles treat new material on radiometric surveying in petroleum geology, describe radiometric instruments (counters, etc.) for registering neutrons and gamma rays, give the results of research with models of rock strata, introduce fundamentals of a new method for effectively utilizing radioactivity in the analysis of rock samples from petroleum-survey bore holes, etc. Problems of method in the study and interpretation of radiometric measurements in bore holes are reviewed, as well as the results of studies in the nonabsorption of tritium in tracing the movement of petroleum and water in a stratum. Finally, a new method of surveying based on measuring the radioactivity of the surface of a prospective petroleum deposit is described. No personalities are mentioned. References accompany each article.

AVAILABLE: Library of Congress

ZOLOTOV, A.V.

Use of potassium salts as standard radioactivity sources. Razved. i prom. geofiz. no.30:93-95 '59. (MIRA 12:12)
(Prospecting--Geophysical methods) (Potassium--Isotopes)

ZOLOTOV, A.V.; ORLOV, L.I.

Relation between the electric resistance of strata and their water and petroleum saturation. Razved.i prom.geofiz. no.32: 3-11 '59. (MIRA 13:4)
(Tuymazy region--Electric prospecting)

ACC NR: AP6032695 SOURCE CODE: UR/0203/66/006/005/0907/0913

AUTHOR: Zolotov, A. V.

ORG: Volga-Ural Branch, All-Union Institute of Geophysics (Volgo-Ural'skiy filial Vsesoyuznogo instituta geofiziki)

TITLE: Role of the shock wave in the formation of the geomagnetic disturbance caused by a large atmospheric explosion

SOURCE: Geomagnetizm i aeronomiya, v. 6, no. 5, 1966, 907-913

TOPIC TAGS: shock wave, geomagnetic disturbance, atmospheric explosion, meteorite, magnetohydrodynamic effect, thermal ionization, meteorite shock wave, IONOSPHERE, ATMOSPHERIC DISTURBANCE

ABSTRACT: On the basis of analysis of data obtained on the Tunguska meteorite of 1908, the problem is examined as to whether the geomagnetic disturbance associated with the explosion could have been formed as a result of the passage of the shock wave through the ionosphere. Such geomagnetic disturbances, it was believed, might have been caused by increased thermal ionization of the ionosphere behind the shock-wave front and by the magnetohydrodynamic effect. Mathematical computations and arguments are introduced, however, that show that if an explosion be it chemical, nuclear, or other, occurs at heights lower than 70—75 km, the shock wave can not possibly have any substantial significance in the formation of the geomagnetic disturbance accompanying the explosion. It is concluded, therefore, that the Tunguska meteorite shock wave, which occurred at heights not exceeding 10 km, played

Card 1/2 UDC: 550.385

ACC NR: AP6032695

no role in the formation of the magnetic disturbance. The most likely cause of the disturbance associated with the Tungusska meteorite explosion was probably the flow of charged particles into a magnetic trap, which could have been formed either by the passage of the body through the ionosphere or as a result of the explosion. The author thanks Yu. D. Kalinin, A. I. Kolchin, and Yu. I. Kopter. Orig. art. has: 2 tables and 2 figures.

SUB CODE: 04/ SUBM DATE: 14Jul65/ ORIG REF: 031/ OTH REF: 005

Card 2/2

ZOLOTOV, A.V.

Some data obtained by investigating soil and plant samples in the region of the Tunguska catastrophy of 1908. Dokl. AN SSSR 140 no.1:103-106 S-O '61. (MIRA 14:9)

1. Volgo-Ural'skiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta geofizicheskikh metodov razvedki. Predstavleno akademikom M.A.Leontovichem.

(Podkamennaya Tunguska Valley--Meteorites)

ZOLOTOV, A.V.

New data on the Tungus catastrophe of 1908. Dokl.AN SSSR no.1:84-87 Ja '61. (MIRA 14:5)

1. Volgo-Ural'skiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta geofizicheskikh metodov razvedki, g. Oktyabr'skiy. Predstavleno akademikom M.A.Leontovichem.
(Podkamennaya Tunguska Valley--Meteorites)

ZOLOTOV, A.V.

PHASE I BOOK EXPLOITATION SOV/5592

Vsesoyuznoye soveshchaniye po vnedreniyu radioaktivnykh izotopov i yadernykh izlucheniy v narodnom khozyaystve SSSR. Riga, 1960.

Radioaktivnyye izotopy i yadernyye izlucheniya v narodnom khozyaystve SSSR; trudy Vsesoyuznogo soveshchaniya 12 - 16 aprelya 1960 g. g. Riga, v 4 tomakh. t. 4: Poiski, razvedka i razrabotka poleznykh iskopayemykh (Radioactive Isotopes and Nuclear Radiation in the National Economy of the USSR; Transactions on the Symposium Held in Riga, April 12 - 16, 1960, in 4 volumes. v. 4: Prospecting, Surveying, and Mining of Mineral Deposits) Moscow, Gostoptekhizdat, 1961. 284 p. 3,640 copies printed.

Sponsoring Agency: Gosudarstvennyy nauchno-tekhnicheskiy komitet Soveta Ministrov SSSR. Gosudarstvennyy komitet Soveta Ministrov SSSR po ispol'zovaniyu atomnoy energii

Eds. (Title page): N. A. Petrov, L. I. Petrenko, and P. S. Savitskiy; ed. of this volume: M. A. Speranskiy; Scientific ed.: M. A. Speranskiy; Executive Eds.: N. N. Kuz'mina and A. G. Ionel';

Card 1/11

Radioactive Isotopes and Nuclear (Cont.) SOV/5592

Tech. Ed.: A. S. Polosina.

PURPOSE : The book is intended for engineers and technicians dealing with the problems involved in the application of radioactive isotopes and nuclear radiation.

COVERAGE: This collection of 39 articles is Vol. 4 of the Transactions of the All-Union Conference of the Introduction of Radioactive Isotopes and Nuclear Reactions in the National Economy of the USSR. The Conference was called by the Gosudarstvennyy nauchno-tekhnicheskiy komitet Sovet Ministrov SSSR (State Scientific-Technical Committee of the Council of Ministers of the USSR), Academy of Sciences USSR, Gosplan SSSR (State Planning Committee of the Council of Ministers of the USSR), Gosudarstvennyy komitet Soveta Ministrov SSSR po avtomatizatsii i mashinostroyeniyu (State Committee of the Council of Ministers of the USSR for Automation and Machine Building), and the Council of Ministers of the Latvian SSR. The reports summarized in this publication deal with the advantages, prospects, and

Card 2/11

Radioactive Isotopes and Nuclear (Cont.) SOV/5592

development of radioactive methods used in prospecting, surveying, and mining of ores. Individual reports present the results of the latest scientific research on the development and improvement of the theory, methodology, and technology of radiometric investigations. Application of radioactive methods in the field of engineering geology, hydrology, and the control of ore enrichment processes is analyzed. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

Card 3/11

ZOLOTOV, A.V.; KUKHARENKO, N.K.

The intrinsic background and spectral sensitivity of discharge-type gamma counters. Razved. i prom. geofiz. no. 35:29-34 '60.
(MIRA 13:12)

(Oil well logging, Radiation)

88568

S/020/61/136/001/016/037
B019/B056

3.1550 (1057, 1062, 1129)

AUTHOR: Zolotov, A. V.

TITLE: New Data on the Tunguska Catastrophe in 1908

PERIODICAL: Doklady Akademii nauk SSSR, 1961, Vol. 136, No. 1, pp. 84-87

TEXT: The data published here were determined in 1959. The nature of the destruction to trees is dealt with, which all point exactly to one center. A comparison with experimental explosions make it possible to estimate the energy liberated in the course of the catastrophe at 4.10^{23} erg. As in the actual center of the destruction timber still stands within a range of roughly 5 km, it is assumed that the explosion took place in the air (not less than 5 km). The ratio between the amplitudes of the explosion wave and the ballistic wave is investigated by studying the destructions to trees. As follows from these investigations, mainly in the zone of incidence of the cosmic body, which were carried out 35-40 km distant from the center, interaction between the two waves exists. From considerations concerning the pressure conditions in the wave fronts, conclusions are drawn as to the velocity of the body. A velocity of 3 km per sec is

Card 1/3

New Data on the Tunguska Catastrophe in 1908 S/020/61/136/001/016/037
B019/B056

obtained by means of a formula by G. I. Pokrovskiy. The same velocity is obtained by means of a formula given by L. D. Landau (Ref. 6). As temperature of the body, 4000-5000°C is given. From a comparison with other solar bolides, the author arrives at the conclusion that the velocity of the body most certainly did not exceed 3-4 km/sec. Three estimations of the liberated energy were carried out, in which the author bases upon the effect of burning on trees, of the burns suffered by persons, and upon light phenomena during the explosion. $1.5 \cdot 10^{23}$ erg, $1.1 \cdot 10^{23}$ erg, and $2.8 \cdot 10^{23}$ erg were obtained for the liberated energies. These three independent estimations thus yield values which agree satisfactorily with one another. S. B. Semenov and P. P. Kosolapov are mentioned. There are 2 figures and 8 Soviet references.

ASSOCIATION: Volgo-Ural'skiy filial Vsesoyuznogo nauchno-issledovatel'skiy instituta geofizicheskikh metodov razvedki g. Oktyabr'skiy (Volga-Ural Branch of the All-Union Scientific Research Institute for Geophysical Prospecting Methods, Oktyabr'skiy)

PRESENTED: July 14, 1960, by M. A. Leontovich, Academician

ZOLOTOV, B.

The only one in the world. Okhr. truda i sots. strakh. 6 no.9: 6-7 S '63. (MIRA 16:10)

ZOLOTOV, B.

Improve the training of navigators. Rech. transp. 24 no.11: 42-43 '65. (MIRA 19:1)

1. Nachal'nik Sudokhodnoy inspektsii Volzhskogo basseyna.

ZOLOTOV, B. A.

B. A. Zolotov, Sbornik voprosov i zadach po fizike dlya 6 i 7 klassov /Collection of Physics Questions and Problems for the sixth and seventh Grades/, Uchpedgiz, 10 sheets

Contains 935 questions and problems for the sixth and seventh grade physics course. It correcponds to the standard text book. The questions and problems reflect the current Soviet technology. Solution of many of the questions and problems requires independent observations and experiments by the pupils.
Intended as an aid for the teacher.

SO: U-6472, 12 Nov 1954

PARLASHKEVICH, N.Ya.; VYKHODTSEV, I.A.; ZOLOTOV, B.D.

Automatic potentiometric control in the production of indo-o-toluidine.
Khim.prom.no.4:242-244 Je '56. (MLRA 9:10)
(Potentiometric analysis) (Toluidins) (Electrodes)

SISOYAN, Grigoriy Artem'yevich; ZOLOTOV, B.V., red.; KISELEVA, T.I., red.izd-va; ISLENT'YEVA, P.G., tekhn.red.

[Electric arc in electric furnaces] Elektricheskaia duga v elektricheskoi pechi. Izd.2., ispr. i dop. Moskva, Gos. nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1961. 414 p. (MIRA 14:4)
(Electric arc) (Electric furnaces)

ZOLOTOV, B.V.

137-58-5-9070D

Translation from. Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 46 (USSR)

AUTHOR: Zolotov, B.V.

TITLE: An Investigation of the Operation of Electrical Contactor-type Relay Regulators Employed With Thermal Ore Furnaces (Issledovaniye raboty tokovykh releyno-kontaktornykh regulyatorov rudnotermicheskikh pechey)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Candidate of Technical Sciences, presented to the Mosk. energ. in-t (Moscow Power Institute), Moscow, 1957

ASSOCIATION: Mosk. energ. in-t (Moscow Power Institute), Moscow

1. Furnaces--Operation 2. Electric relays--Applications

Card 1/1

SVENCHANSKIY, Aleksandr Danilovich,; ZOLOTOV, B.V., red.; LARIONOV, G.Ye., tekhn. red.

[Industrial electric furnaces] Elektricheskie promyshlennye pechi. Moskva, Gos. energ. izd-vo. Pt. 1. [Resistance furnaces] Pechi soprotivleniia. 1958. 287 p. (MIRA 11:11)
(Electric furnaces)

ZOLOTOV, B. V. Cand Tech Sci -- (diss) "Study of the operation of ~~electric~~ current contactor type relay regulators of thermal ore furnaces." Mos, 1957. 15 pp (with graphs) (Mos Order of Lenin Power Engineering Inst im V. M. Molotov. Chair Faculty of Electrothermal Plants). (KL, 43-57, 88)

ZOLOTOV, B.V.

Investigation of the conditions for automatic control of the power of heat-treatment furnaces. Trudy MEI no.28:113-130 '56.
(Electric furnaces) (Automatic control) (MLRA 10:6)

ZOLOTOV, B.V., kand. tekhn. nauk; SMELYANSKIY, M.Ya., kand. tekhn. nauk, dots., red.

[Arc furnaces: Electrical characteristics of arc furnaces; summary of lectures] Dugovye pechi: Elektricheskie kharakteristiki dugovykh pechei; konspekt lektsii. Moskva, Mosk. energeticheskii in-t, 1964. 114 p. (MIRA 18:5)

SOV/112-58-2-2396

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1958, Nr 2, p 100 (USSR)

AUTHOR: Zoletov, B. V.

TITLE: An Investigation of the Automatic Power Regulation of a Thermal Ore Furnace (Issledovaniye usloviy avtomaticheskogo regulirovaniya moshchnosti rudnotermicheskoy pechi)

PERIODICAL: Tr. Mosk. energ. in-ta, 1956, Nr 28, pp 113-130

ABSTRACT: The requirements have been investigated for a current-type relay-contactor automatic power controller to be applied to a large ore-thermal furnace operating on the no-slag method. The current on the high-voltage side of the furnace transformer, in the "delta-connected electrodes" supply circuit, was selected as the regulation parameter. The characteristics of current vs. electrode feed (of the same or an adjacent phase) were determined experimentally; in the processing of the experimental data, statistical functions for the mathematical expectation of the current and its rms deviations were found. Three characteristic sets of current-time variation conditions for various

Card 1/2

SOV/112-58-2-2396

An Investigation of the Automatic Power Regulation of a Thermal Ore Furnace

charge-arc resistance ratios were found, for a stationary electrode, for manual control, and for automatic control. It was discovered that the relationship between a small electrode travel and the current deviation can be taken as linear and that, in view of the many factors influencing the furnace operating conditions, a current variation cannot always be compensated by changing the position of the electrode. An automatic regulation system should ensure the slipping of electrodes at the rate of 0.05-0.1 m/min, but not more than 0.22-0.235 m/min, and should have an adjustable neutral zone that would prevent overloading of the starting equipment at sudden current changes.

B.S.B.

Card 2/2

L 09144-67 EWT(m)/EWP(t)/ETI IJP(c) JD/JG
ACC NR: AR6027496 SOURCE CODE: UR/0137/66/000/004/B015/B015

AUTHOR: Smelyanskiy, M. Ya.; Zolotov, B. V.; Tsishevskiy, V. P.; Zhigalko, Ye. K.; Kuvaldin, A. B.

TITLE: Survey of work done by the "Electrothermal Installations" Department in the field of investigation and industrial application of the high-intensity electric arc

SOURCE: Ref. zh. Metallurgiya, Abs. 4B93

REF SOURCE: Elektrotermiya. Nauchno-tekhn. sb., vyp. 46, 1965, 36-42

TOPIC TAGS: electric arc, metal purification, refractory metal

ABSTRACT: Research has been in progress since 1961 in the "Electrical Installations" Department of Moscow Power Engineering Institute on the working process in installations for arc-heating of gases together with development of methods for designing installations suitable for industrial application. Investigations of the arc-heating process are described for gases with axial stabilization of the arc in a cylindrical channel and data are given on the effect which the type of working medium has on the electrical and power characteristics of the process. An installation is developed for producing refractory metals from their compounds. This installation was used for conducting experiments on carbothermic reduction of niobium in a plasma jet. Raw material in the form of niobium pentoxide and carbide pressed into a billet 6-8 mm in diameter

Card 1/2 UDC: 669:621.365.6:533.9

L 09144-67

ACC NR: AR6027496

was fed by the mechanism into a plasma jet at a rate of 2-4 cm/min. The carbon concentration in the reaction products was from 0.38 to 1.1% with a reduction to 0.14% after the second remelting, which shows that metallic Nb and Ta may be produced in ingots. 9 illustrations, bibliography of 11 titles. V. Pryanikova. [Translation of abstract]

SUB CODE: 11

Card 2/2 nst

ZOLOTOV, D. I.

Technology

Laboratory equipment for testing building materials, Moskva, Uglestekhizdat, 1951.

9. Monthly List of Russian Accessions, Library of Congress, December 1952 Uncl.

ZOLOTOV, E.B., inzh.; MIKHEIEV, A.A., doktor tekhn. nauk

Determining the physicomechanical characteristics of wheat flour dough by means of a capillary viscosimeter. Pishch. prom. no.2:77-82 '65. (MIRA 18:11)

BOGOLYUBSKIY, N.; BORISOV, S.; GRIGOR'YEV, N.; GUSAROV, M.; GUSEV, L.; ZHAROV, S.; ZHETVIN, N.; ZALOGIN, S.; ZOLOTOV, G.; KHOKHLOV, N.; KLEMENT'YEVA, A.; KOMAROV, A.; KOSMACHEV, V.; LAPTEV, V.; LOMONOSOV, V.; MIKHAYLOV, A.; NOVIKOV, I.; PERTSEV, M.; PROKOFOVICH, P.; ROMANOV, I.; RUBLINSKAYA, R.; SVIRIDOV, G.; SOTNIKOV, G.; SUBBOTIN, A.; TURTAIKOV, I.; CHESNOKOV, S.; CHICHKIN, K.; CHIKHANOV, I.

Grigorii Markelovich Il'in; an obituary. Metallurg 3 no.10:36 O '58. (MIRA 11:10)

(Il'in, Grigorii Markelovich, 1894-1958)

ZOLOTOV, G., val'tsovshchik, Geroy Sotsialisticheskogo Truda, deputat Verkhovnogo Soveta RSFSR.

Heroic deeds of our days. Sov. profsoiuzy 17 no.7:4-6 Ap '61. (MIRA 14:3)

1. Zavod "Serp i molot."
(Moscow--Steelworkers) (Socialist competition)

ZOLOTOV, I.G.

Testing unit for checking gas meters with parallel nozzles.
Gaz. prom. 8 no.3:30-32 '63 (MIRA 17:7)

ACC NR: AP7004574 SOURCE CODE: UR/0203/66/006/003/0556/0567

AUTHOR: Zolotov, I. G.

ORG: Institute of Terrestrial Magnetism, Ionosphere and Radio Wave Propagation, LO, AN SSSR (Institut zemnogo magnetizma, ionosfery i rasprostraneniya radiovoln LO AN SSSR) 12

TITLE: Representation of the geomagnetic field using multipoles

SOURCE: Geomagnetizm i aeronomiya, v. 6, no. 3, 1966, 556-567

TOPIC TAGS: geomagnetic field, geophysics

ABSTRACT: The paper cited below presents an algebraic method for determining the parameters of multipoles. The author has determined the parameters of second-, third-, and fourth-order multipoles for a number of spherical analyses of the geomagnetic field for the period 1829-1958. The changes of the parameters of the multipoles during this period are considered. There is a discussion of the westerly drift of the geomagnetic field and the presence of other drift components. The author thanks V. I. Pochtarev for suggesting the problem and for his interest in this work. The author also thanks T. A. Agekyan for discussions of the mathematical portion of this work and V. I. Kolenova for assistance with the computations. Orig. art. has: 5 figures, 10 formulas and 4 tables. [JPRS: 38,937]

SUB CODE: 08 / SUBM DATE: 19Apr65 / ORIG REF: 007 / OTH REF: 003

UDC: 550.383

Card 1/1

METALLOVA, V.V.; ZOLOTOV, I.G.; FAYNBERG, F.S.

Results of studies of the magnetic properties of trap rocks from the southern Siberian Platform. Uch.zap.LGU no.303:38-48 '62. (MIRA 15:11)

(Siberian Platform—Rocks—Magnetic properties)

ZOLOTOV, I.I.

Control circuit of lifting jacks for streetcars. Rats. predl. na gor. elektrotransp. no.9:14-15 '64.

(MIRA 18:2)

1. Depo imeni Skorokhodova Tramvayno-trolleybusnogo upravleniya Leningrada.

ACC NR: AP7008939 SOURCE CODE: UR/0203/66/006/005/0951/0953

AUTHOR: Zolotov, I. G.

ORG: Leningrad Department, Institute of Terrestrial Magnetism, Ionosphere and Radio Wave Propagation, AN SSSR (Institut zemnogo magnetizma ionosfery i rasprostraneniya radiovoln AN SSSR, Leningradskoye otdeleniye)

TITLE: Westerly drift of the earth's non-dipole magnetic field and solar activity

SOURCE: Geomagnetizm i aeronomiya, v. 6, no. 5, 1966, 951-953

TOPIC TAGS: earth magnetic field, solar activity

SUB CODE: 08,03

ABSTRACT:

A study has been made of the temporal changes of the rate of westerly drift of the non-dipole geomagnetic field and its dependence on solar activity. For determining the rate of westerly drift of the non-dipole field the author uses the method proposed by T. Yukutake (Bull. Earthq. Res. Inst., 40, 1, 1962). He derived formulas for determining the rate of westerly drift with integration along circles of latitude. The mean rate of drift is computed for each circle of latitude. The author, on the other hand, has determined the mean rate of drift of the magnetic field for the earth as a whole and therefore integration was for the entire earth's surface. A formula is derived for determining the mean velocity of westerly drift of the non-dipole field. The formula shows that for determining the rate of drift for any epoch it is necessary to have a set of Gauss coefficients for this epoch of both the earth's magnetic field and its secular variations. The re-

Card 1/2 UDC: 523.745:550.389

0929 1784

ACC NR: AP7008939

sult of computation of the rate of westerly drift computed in this way is shown in a figure. With a probability of 90% it can be stated that there is a negative correlation of the rate of westerly drift of the non-dipole part of the geomagnetic field and solar activity. For explaining this dependence there are two facts of primary importance: 1) with an increase of solar activity the rate of westerly drift decreases; 2) this dependence is observed not only for the total field, but also for its inner part. This correlation constitutes an important link in the problem of solar-terrestrial relationships. Orig. art. has: 1 figure and 3 formulas. [JPRS: 38,677]

Card 2/2

ZOLOTOV, I.N.

Regulating the wages in the head mechanic's sections. Tekst. prom. 17 no.5:59-60 My '57. (MLRA 10:6)

1. Nachal'nik otdela truda i zarabotnoy platy Yelgavskoy l'noprya-dil'noy fabriki.
(Textile machinery--Maintenance and repair) (Wages)

ZOLOTOV, L. A.

ZOLOTOV, L. A. --"Investigation of the Effect of the Surface Roughness of Section Tubes on the Pressure Losses and Efficiency of Turbines." (Dissertations for Degrees in Science and Engineering Defended at USSR Higher Educational Institutions) Min of Higher Education USSR, Moscow Order of Lenin Power Inst imeni V. M. Molotov, Moscow-Leningrad, 1955

SO: Knizhnaya Letopis', No. 25, 18 Jun 55

* For Degree of Candidate in Technical Sciences

L 11589-66 EWT(m)/EWP(t)/EWP(b)/EWA(h) JD

ACC NR: AP6000373 SOURCE CODE: UR/0286/65/000/021/0091/0091

AUTHORS: Shaposhnikov, A. P.; Zolotov, I. N.; Suvareva, T. S.; Borukhin, B. Ya.; Makarova, L. N.; Buchenkov, F. I.; Markov, F. F

ORG: none

TITLE: Method for correcting the chemical composition of fused metallurgical slags. Class 40, No. 176197

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 21, 1965, 91

TOPIC TAGS: slag, synthetic slag, metallurgical process, metallurgr

ABSTRACT: This Author Certificate presents a method for adjusting the chemical [illegible] additives, [illegible] [illegible] for the machine [illegible] fused slag and [illegible] additives. The latter are selected so that the [illegible] temperature is below the temperature of the [illegible] slag. Gabbro, diabase, [illegible] andesite, power plant ashes, and similar materials are used as additives. [illegible] are crushed and [illegible] their respec- [illegible] fused slag. The amount of additives [illegible] by wt. of the total mass of the mixture.

SUB CODE: 11/ SUBM DATE: 19Jun62

Card 1/1 HCO UDC: 669.094.82:669.046.58

SHAPOSHNIKOV, A.P.; ZOLOTOV, I.N.

Cast stone pipe. Stek. i ker. 22 no.3:2-3 Mr '65.
(MIRA 18:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut stekla (for Shaposhnikov). 2. Moskovskiy opytnyy zavod steklokristallicheskikh materialov i kamennogo lit'ya (for Zolotov).

14(6) SOV/112-59-1-486

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 1, p 64 (USSR)

AUTHOR: Zolotov, L. A.

TITLE: Discharges Through the Unfinished Building of the Irkutsk Hydroelectric Station During Dam-Construction Work on the Angara River

PERIODICAL: Tr. N.-i. sektora Mosk. fil. in-ta "Orgenergostroy," 1957, Nr 1, pp 36-46

ABSTRACT: Bibliographic entry.

Card 1/1

ZOLOTOV, L.A., kand.tekhn.nauk; SEMENKOV, V.M., inzh.

Hydraulic investigation of a new type of concentrated-fall hydroelectric power station. Trudy Nauch.-issl.sekt.Mosk.fil.Inst. "Orgenergostroi" no.3:71-82 '59. (MIRA 14:7)
(Hydroelectric power stations)

Zolotov, L.A.

AYVAZ'YAN, V.G., doktor tekhnicheskikh nauk, professor; ZOLOTOV, L.A., kandidat tekhnicheskikh nauk; KHMELKOV, V.M., inzhener.

Increasing the capacity of pressure spillways of "integral" hydroelectric power stations during maximum flood discharge. Gidr. stroi. 26 no.3:15-20 Mr '57. (MLRA 10:4)

(Hydroelectric power stations)

BELYAYEV, A.A.; ZOLOTOV, L.V.

Surgical tactics in perforations of the uterus with injury to the internal organs.. Khirurgiia 35 no. 5:98-103 My '59.
(MIRA 13:10)

1. Iz 1-y khirurgicheskoy kliniki (zav. - prof. S.V. Lobachev) Moskovskogo gorodskogo nauchno-issledovatel'skogo instituta skoroy pomoshchi im. Sklifosovskogo (dir. - zasluzhennyy vrach USSR M.M. Tarasov, glavnyy khirurg - prof. B.A. Petrov).
(UTERUS--RUPTURE) (VISCERA--WOUNDS AND INJURIES)

BELYAYEV, A. A.; ZOLOTOV, L. V.

Emergency repeated laparotomy. Vest. khir. no.4:20-27 '62.
(MIRA 15:4)

1. Iz Moskovskogo gorodskogo ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skogo instituta skoroy pomoshchi im. N. V. Sklifosovskogo (dir. - zasluzh. vrach UkrSSR M. M. Tarasov).

(ABDOMEN—SURGERY)

ZOLOTOV, L.V.

Postoperative intra-abdominal hemorrhage. Khirurgiia 36 no.2: 40-46 F '60. (MIRA 13:12)
(OPERATIONS, SURGICAL) (HEMORRHAGE)

VERESHCHAGIN, V.N., otv.red.; KRASNYY, L.I., otv.red.; VLASOV, G.M., red.; ZOLOTOV, M.G., red.; ZHAMOYDA, A.I., red.; KIPARISOVA, L.D., red.; KODZALEVSKAYA, red.; ONIKHIMOVSKIY, V.V., red.; SAVKANOV, N.P.; CHEMEKOV, Yu.F.; SKVORTSOV, V.P., red.; AVERKIYEVA, T.A., tekhn.red.

[Resolutions of the Interdepartmental Conference on the Elaboration of Standard Stratigraphic Systems for the Far East] Reshenila soveshchaniia Mezhvedomstvennogo soveshchaniia po razrabotke unifitsirovannykh stratigraficheskikh skhem dlia Dal'nego Vostoka. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr, 1958. 51 p. (MIRA 12:3)

1. Mezhvedomstvennoye soveshchaniye po razrabotke unifitsirovannykh stratigraficheskikh skhem dlya Dal'nego Vostoka, Khabarovsk, 1956.
2. Predsedatel' Orgkomiteta Mezhvedomstvennogo soveshchaniya po razrabotke unifitsirovannykh stratigraficheskikh skhem dlya Dal'nego Vostoka (for Krasnyy). (Soviet Far East--Geology, Stratigraphic)

ZOLOTOV, M.N.,
A. V. FROST, ACTA PHISCHIM 1, 511-20 (1934)

18(5)
AUTHOR: Layko, F.M., and Zolotov, N.A., Engineers

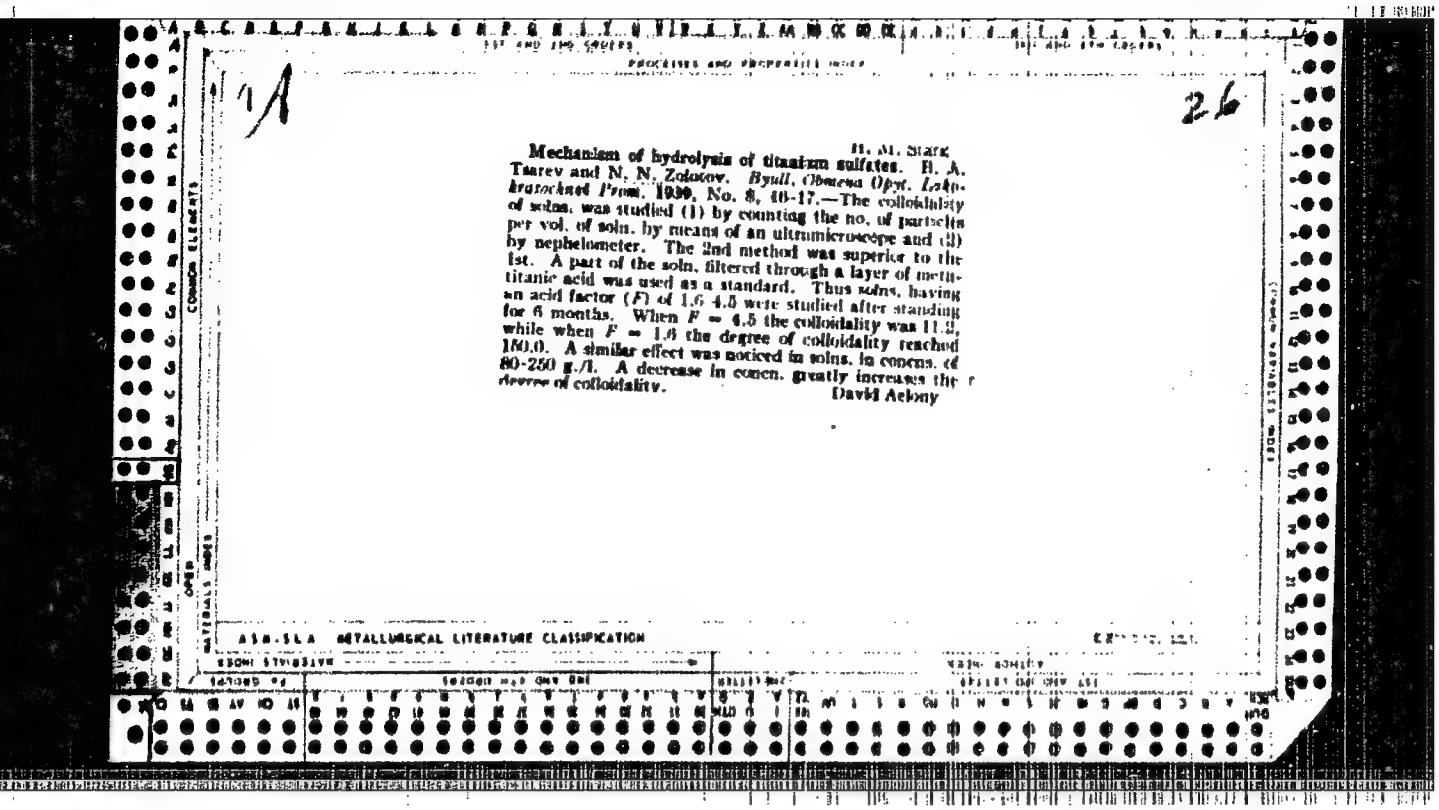
SOV/128-59-4-7/27

TITLE: Automating the Charging of Coke Into the Cupola

PERIODICAL: Liteynoye Proizvodstvo, 1959, Nr 4, pp 12-14 (USSR)

ABSTRACT: In the foundry for malleable cast iron of the Likhachev Auto Plant, an installation was built which mechanizes the sieving process, and provides for the transport and automatic charging of coke into the cupola. Figures 1-3 give a detailed description of this installation. It has a special charging window which is opposite the usual charging window of the cupola. The frame of the window and the gate valve are water cooled. The mechanization of the coke and lime stone charging is saving much heavy physical labor. Wagons, cranes, and other machinery are now become superfluous. The coke consumption is kept low, and the output of the cupola is raised by 10-15%, because there are no more interruptions of its operation, which are unavoidable when charging mannually. There are 2 diagrams and 1 photograph.

Card 1/1



1A

26

Mechanism of hydrolysis of titanium sulfates. H. A. Tsarev and N. N. Zolotov. *Byull. Obshchest. Ispyt. Prirody, Otdel. Khim.* 1939, No. 8, 46-17.—The colloidality of solns. was studied (1) by counting the no. of particles per vol. of soln. by means of an ultramicroscope and (2) by nephelometer. The 2nd method was superior to the 1st. A part of the soln. filtered through a layer of metatitanic acid was used as a standard. Thus solns. having an acid factor (F) of 1.6 4.5 were studied after standing for 6 months. When F = 4.5 the colloidality was 11.2, while when F = 1.6 the degree of colloidality reached 180.0. A similar effect was noticed in solns. in concns. of 80-250 g./l. A decrease in concn. greatly increases the degree of colloidality.

H. M. Stark
David Aelony

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

PROKOP'YEVA, M.T., doktor veterinarnykh nauk; DOROSHKO, I.N., kand. veterinarnykh nauk; GUROVA, Ye.I., kand.veterinarnykh nauk; ZOLOTOV, N.N., veterinarnyye vrachi

Use of furazolidone in the pullorum disease and paratyphoid fever of poultry. Veterinariia 38 no.1:41-46 Ja '61. (MIRA 15:4)

1. Ukrainskiy NIIEV.
(Oxazolidinone) (Poultry—Diseases and pests)
(Pullorum disease)

ZOLOTOV, N. N., IGNATOV, V. A., PROKOF'YEVA, M. T., DOROSHKO, I. N., GUROVA, E. I.
Veterinary Surgeons, Ukrainian NIIEV.

"Application of Furasolidone in Pullorum Disease and Paratyphoid of Fowls."

Veterinariya, Vol. 38, No. 1, p. 41, 1961.

1. ZOLOTOV, N. N.: PROKOF'YEVA, M. T.: DOROSHKO, I. N.

2. USSR (600)

4. Antigens and Antibodies

7. Importance of local strains for increasing the sensibility of the pullorum disease antigen. Nauch.trudy UIEV, 18, 1951.

9. Monthly List of Russian Accessions, Library of Congress, March 1953, Unclassified.

1. PROKOF'YEVA, M. T. and DOROSHKO, I. N. and ZOLOTOV, N. N.

2. USSR (600)

4. Pullorum Disease

7. Importance of local strains for increasing the sensibility of the pullorum disease antigen. Nauch.trudy UIEV 18 1951.

9. Monthly List of Russian Accessions, Library of Congress, March 1953, Unclassified.

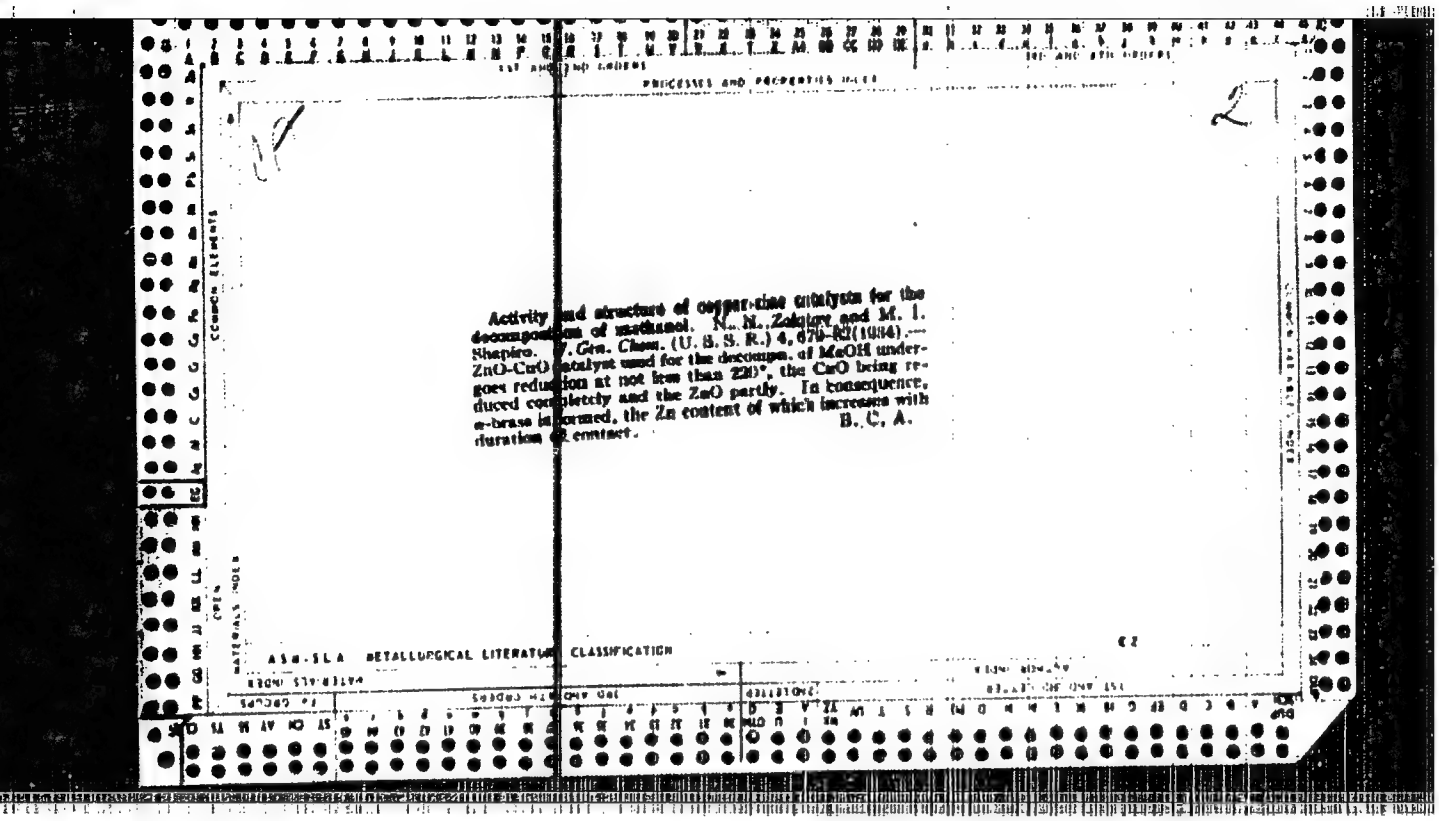
ZOLOTOV, N. N.; IGNATOV, V. A.; TIMOFEYEVA, M. I.; DOROSHKO, L. M. and GONOVA, E. I.

"About the role of a deep permanent litter in epizootiology of hen pullorum disease and tuberculosis."

Veterinariya, Vol. 37, No. 5, 1960, p. 28

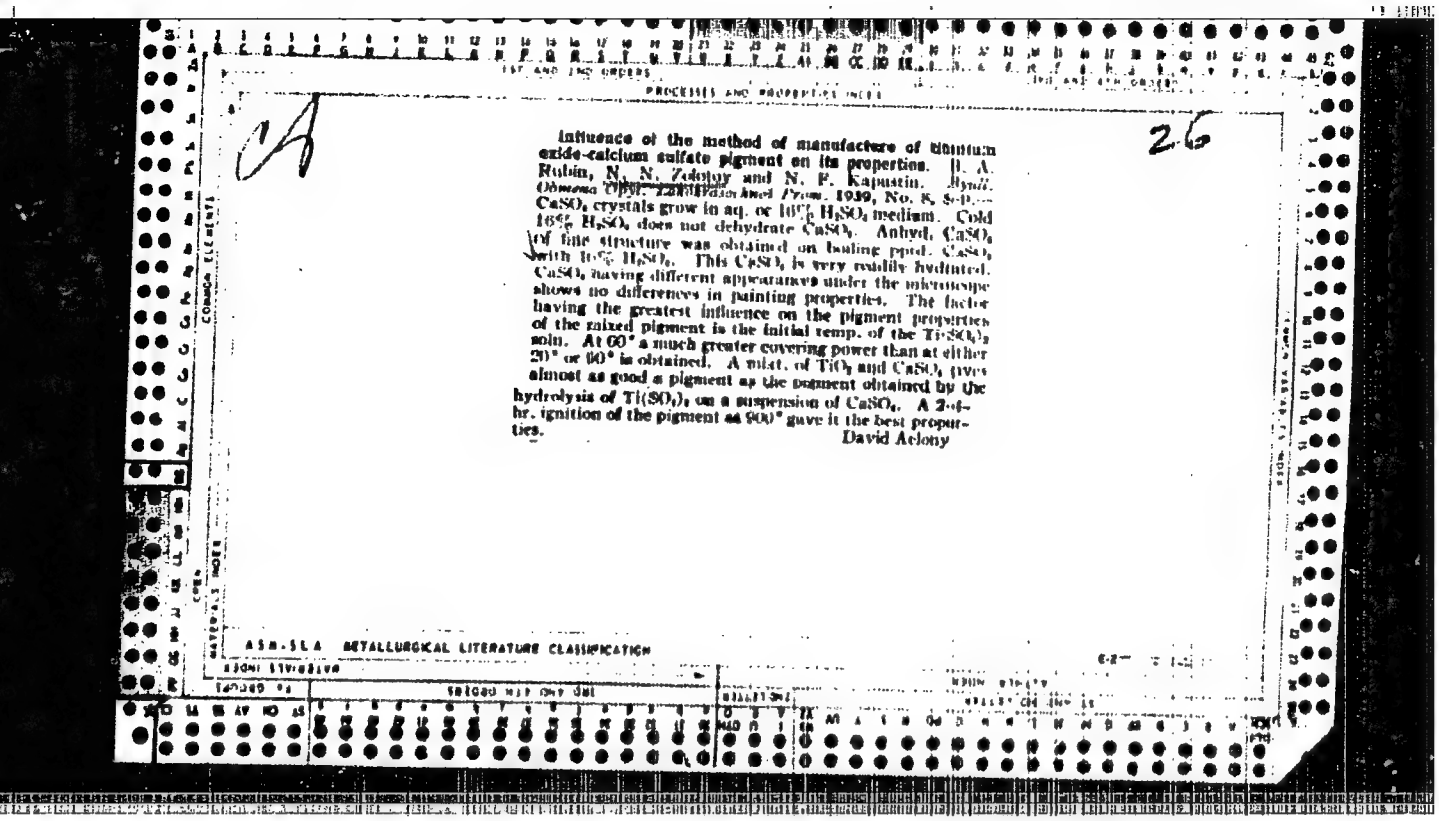
Zolotov - Vet. Dr.

Ukr. Sci. Res. Inst. Experimental Vet.



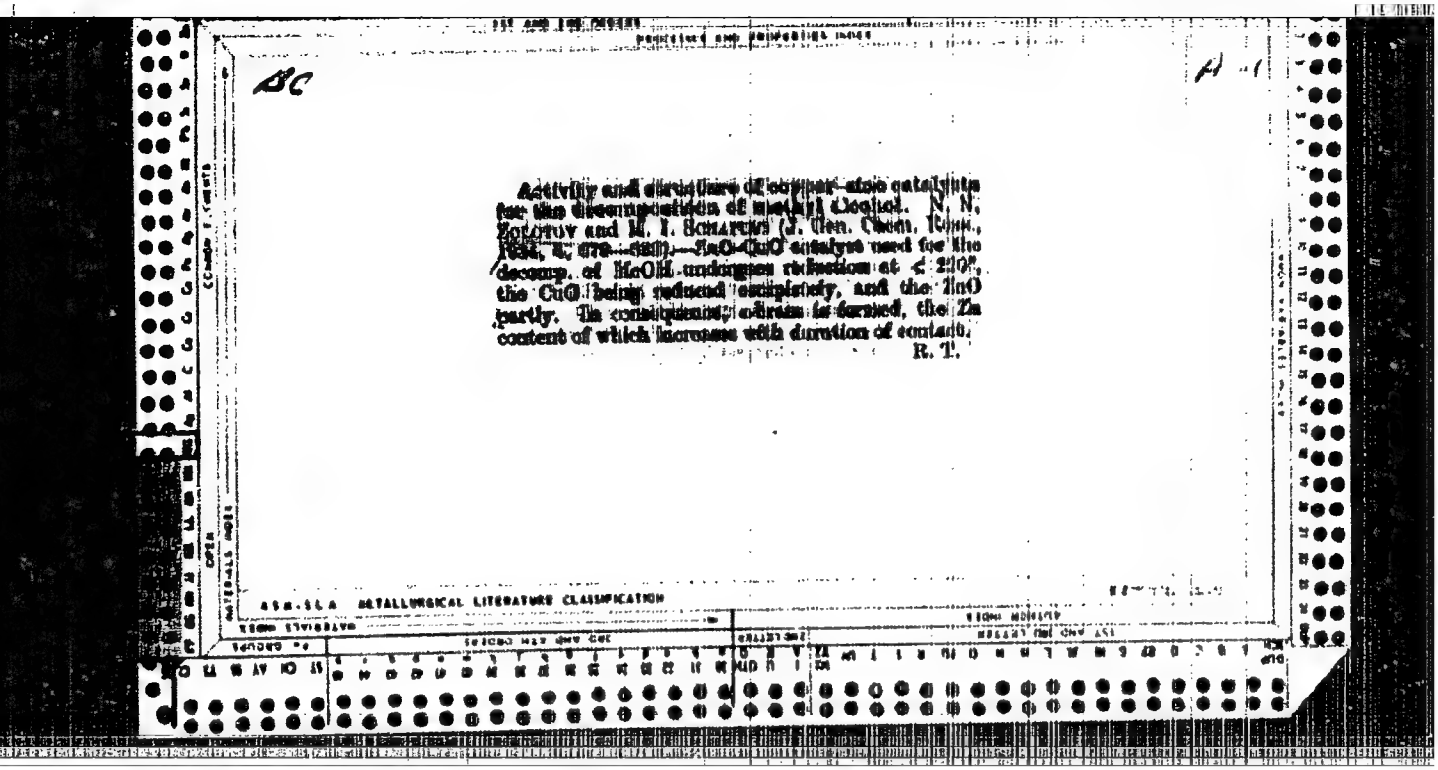
Activity and structure of copper-zinc catalysts for the decomposition of methanol. N. N. Zakharov and M. I. Shapiro. *Zh. Fiz. Khim.* (U. S. S. R.) 4, 670–82(1934).—ZnO-CuO catalyst used for the decomps. of MeOH undergoes reduction at not less than 220°, the CuO being reduced completely and the ZnO partly. In consequence, α-brass is formed, the Zn content of which increases with duration of contact.

B. C. A.



Influence of the method of manufacture of titanium oxide-calcium sulfate pigment on its properties. [U. A. Rubin, N. N. Zolotar' and N. F. Kapustin. *Byull. Obmena Opyt. Zavodskoi Lab.* 1939, No. 8, 8-9.—$CaSO_4$ crystals grow in aq. or 10% H_2SO_4 medium. Cold 16% H_2SO_4 does not dehydrate $CaSO_4$. Anhyd. $CaSO_4$ of fine structure was obtained on boiling ppd. $CaSO_4$ with 10% H_2SO_4. This $CaSO_4$ is very readily hydrated. $CaSO_4$ having different appearances under the microscope shows no differences in painting properties. The factor having the greatest influence on the pigment properties of the mixed pigment is the initial temp. of the $Ti(SO_4)_2$ soln. At 60° a much greater covering power than at either 20° or 90° is obtained. A mixt. of TiO_2 and $CaSO_4$ gives almost as good a pigment as the pigment obtained by the hydrolysis of $Ti(SO_4)_2$ on a suspension of $CaSO_4$. A 2-hr. ignition of the pigment at 900° gave it the best properties.

David Aclony



BC

H-1

Activity and structure of copper-zinc oxide catalysts for the decomposition of methyl alcohol. N. N. Zolotov and M. I. Temkin (J. Gen. Chem. [Russ.], 1934, 4, 679—688).—ZnO-CuO catalysts used for the decomp. of MeOH undergoes reduction at < 220°, the CuO being reduced completely, and the ZnO partly. In consequence, a brass is formed, the Zn content of which increases with duration of contact.

R. T.

ACC NR: AR6024044 SOURCE CODE: UR/0044/66/000/004/V031/V031

AUTHOR: Golyand, I. I.; Zolotov, O. M.; Rotov, Ye. G.; Sinel'nikov, D. Ye.

TITLE: The modernization of the digital computer "Ural 1" 16

SOURCE: Ref. zh. Matematika, Abs. 4V188

REF SOURCE: Sb. Vopr. vychisl. matem. i vychisl. tekhn. Rostov-na-Donu, Rostovsk. un-t, 1965, 123-135

TOPIC TAGS: computer design, computer research, computer technology, digital computer, computer circuit

ABSTRACT: The description of numerous changes introduced into the circuit of the digital computer "Ural-1", used at the computer center of the RGU, is presented. The new operations introduced are: summation over the "unit" modulus; "arithmetic shift"; additional modification of the operation of conditional control transmission; and the improvement of the circuit of the control register. It is shown that these changes allow a widening of the class of problems which may be solved. Numerous changes were introduced with the aim of increasing the reliability and simplifying the exploitation. The time diagram of the counter within the block of the address of the number NMB has been stabilized, and the blocking of the recording over the senior-junior addresses has become more reliable; changes were carried out also within the block of synchronization NML, and the false zone determination was blocked; germanium and copper oxide

Card 1/2 UDC: 681.142.001.3:51

ACC NR: AR6024044

diodes were substituted by silicon diodes, and the like. [Translation of abstract] 11 illustrations. V. Zhdanov

SUB CODE: 09

Card 2/2

ZOLOTOV, Oleg Mikhaylovich, inzh.; SINEL'NIKOV, Dmitriy Yefimovich, inzh.

Conversion of the group summation operation of the "Ural I" computer to calculation of periodic functions. Izv. vys. ucheb. zav.; elektromekh. 5 no.7:817 '62. (MIRA 15:10)

1. Vychislitel'nyy tsentr Rostovskogo gosudarstvennogo universiteta.

(Electronic calculating machines)

ACC NR: AR6026619 SOURCE CODE: UR/0372/66/000/004/V031/V031

AUTHOR: Golyand; I. I.; Sinel'nikov, D. Ye.; Zolotov, O. M.; Rotov, Ye. G.

TITLE: Modernizing the Ural-1 digital electronic computer

SOURCE: Ref. zh. Kibernetika, Abs. 4V188

REF SOURCE: Sb. Vopr. vychisl. matem. i vychisl. tekhn. Rostov-na-Donu, Rostovsk. un-t, 1965, 123-136

TOPIC TAGS: ELECTRONIC COMPUTER, COMPUTER RELIABILITY, electronic digital computer, digital computer, computer component, computer design / Ural-1 digital computer

ABSTRACT: A number of modifications introduced in the scheme of the Ural-1 electronic digital computer used at the computer center of Rostov-on-Don State University is described. The following operations were introduced: modulo "unity" addition; "arithmetic shift"; additional modification of unconditional transfer; improvements of the control register circuit. It is pointed out that these alterations make it possible to broaden the class of solvable problems. A number of alterations was undertaken with the object of enhancing reliability and facilitating operation: the time diagram of the counter in the magnetic drum memory address

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ACC NR: AR6026519

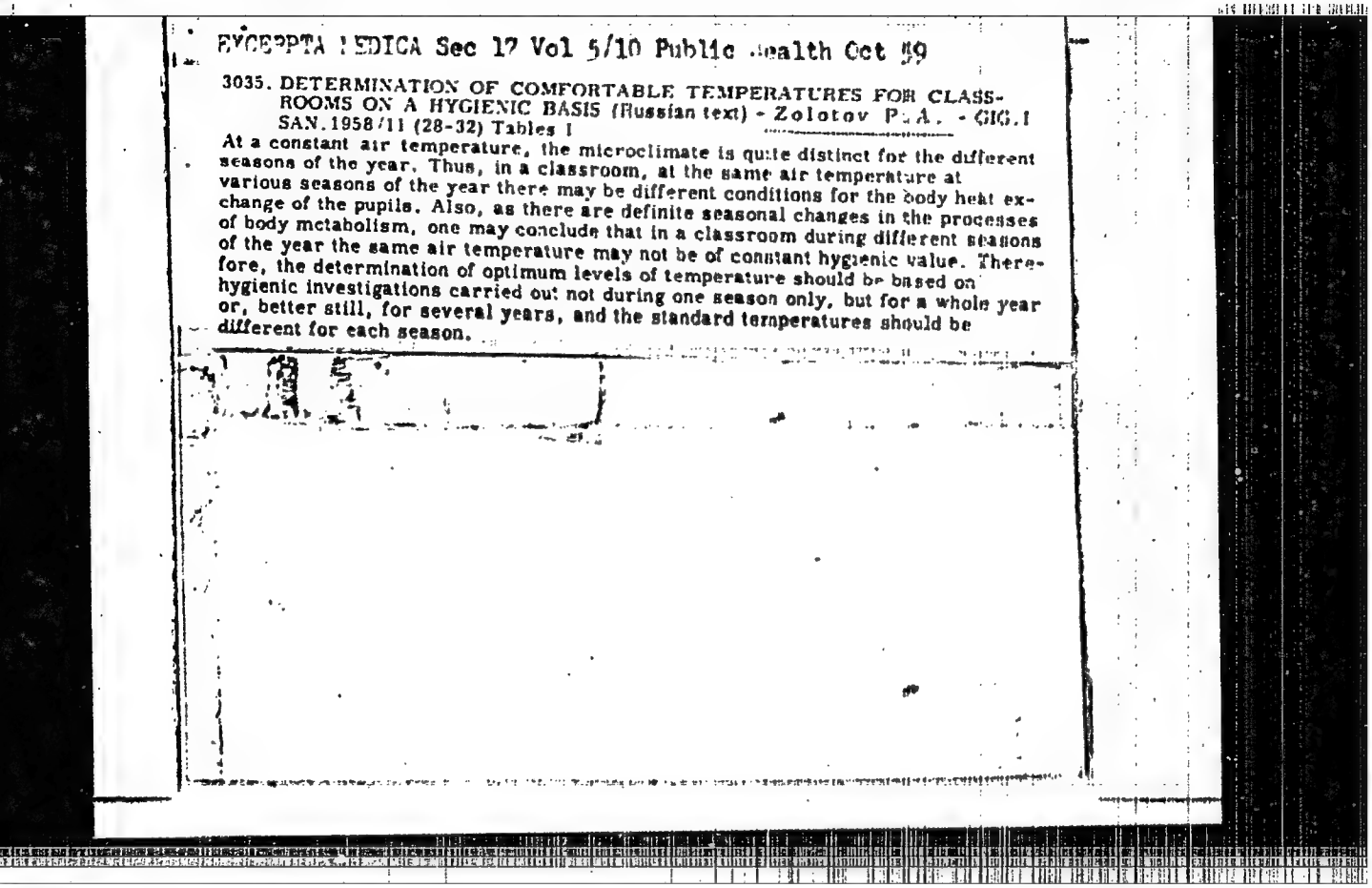
unit was stabilized, the reliability of write inhibition with respect to higher- and lower-order addresses was improved; the magnetic tape memory synchronizing unit was modified; mistakes in zone identification were blocked; germanium and cuprous-oxide diodes were replaced with their silicon counterparts, etc. 11 fig. V. Zhdanov. [Translation of abstract]

SUB CODE: 09

Card 2/2

ZOLOTOV, P.A., dots., red.; ZOLOTOVA, P.A., red.

[Problems in hygiene in eastern Transbaikalia; scientific and practical works] Voprosy gigiemy v Vostochnom Zabaikal'e; sbornik nauchno-prakticheskikh rabot. Chita, Chitinskii, gos. med. in-t, 1962. 297 p. (MIRA 17:5)



EXCERPTA MEDICA Sec 17 Vol 5/10 Public Health Oct 59

3035. DETERMINATION OF COMFORTABLE TEMPERATURES FOR CLASSROOMS ON A HYGIENIC BASIS (Russian text) - Zolotov P.A. - GIG.I SAN.1958/11 (28-32) Tables 1

At a constant air temperature, the microclimate is quite distinct for the different seasons of the year. Thus, in a classroom, at the same air temperature at various seasons of the year there may be different conditions for the body heat exchange of the pupils. Also, as there are definite seasonal changes in the processes of body metabolism, one may conclude that in a classroom during different seasons of the year the same air temperature may not be of constant hygienic value. Therefore, the determination of optimum levels of temperature should be based on hygienic investigations carried out not during one season only, but for a whole year or, better still, for several years, and the standard temperatures should be different for each season.

ZOLOTOV, P.A., kand. med. nauk

Hygienic determination of comfortable temperatures in classrooms.
Gigi i san. 23 no.11:28-32 N '58. (MIRA 12:8)

1. Iz kafedry obshchey gigiyeny Gor'kovskogo meditsinskogo instituta imeni S.M. Kirova.
(SCHOOLHOUSES--HEATING AND VENTILATION)

ZOLOTOV, P. A.

Zolotov, P. A.

"The Hygienic Characteristics of the Microclimate of Classrooms with Eastern, Southern, Western, and Northern Exposures in the City of Gor'kiy." Gor'kiy State Medical Inst imeni S. M. Kirov. Gor'kiy, 1955 (Dissertation for the degree of Candidate in Medical Science)

SO: Knizhnaya letopis' No. 27, 2 July 1955

BELYAYEV, I.I., prof.; ZOLOTOV, P.A., dotsent

Concerning a review. Gig. i san. 26 no.8:96-98 Ag '61. (MIRA 15:4)

(PUBLIC HEALTH)

ZOLOTOV, P.A.

Ecological and seasonal changes in the skin temperature in man. Fiziol.zhur. 51 no.11:1343-1350 N '65. (MIRA 18:11)

1. Meditsinskiy institut imeni S.M.Kirova, Gor'kiy.

BALAYEV, Lev Grigor'yevich; TSAREV, Petr Vasil'yevich; POPOV, I.V., doktor geol.-miner. nauk, prof., otv. red.; ZOLOTOV, P.F., red.izd-va

[Loess in central and eastern Ciscaucasia] Lessovye porody TSentral'nogo i Vostochnogo Predkavkaz'ia. Moskva, Izd-vo "Nauka," 1964. 247 p. (MIRA 17:4)

LAZAREV, L.P., doktor tekhn.nauk, prof., red.; ZOLOTOV, P.F., inzh.red.; VINOGRADSKAYA, S.I., izdat.red.; OREKHKINA, V.I., tekhn.red.

[Manufacture of optical instruments; collected articles] Opticheskoe priborostroenie; sbornik statei. Moskva, Gos.nauchno-tekhn. izd-vo Oborongiz, 1961. 125 p. (Moscow. Moskovskoe vysshee tekhnicheskoe uchilishche. Trudy, no.103). (MIRA 14:12)
(Optical instruments)